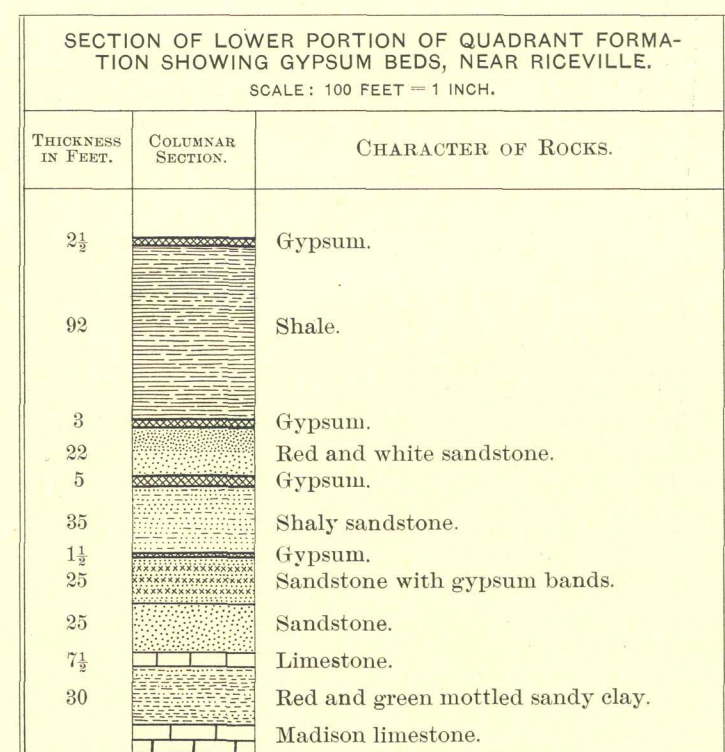
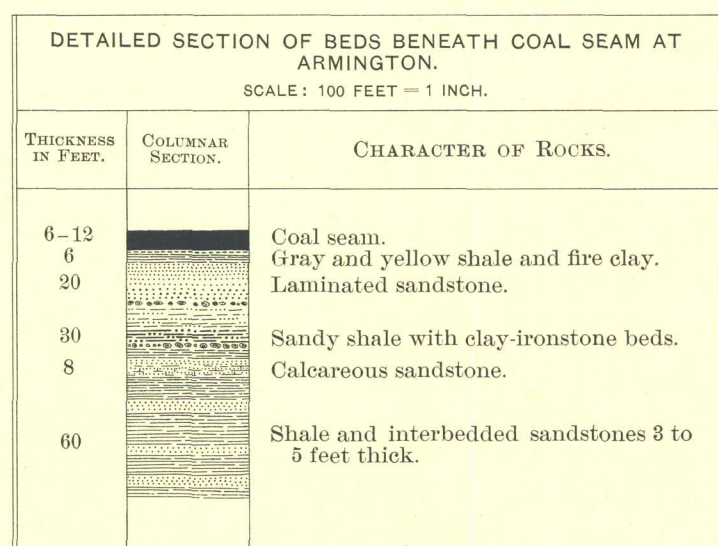
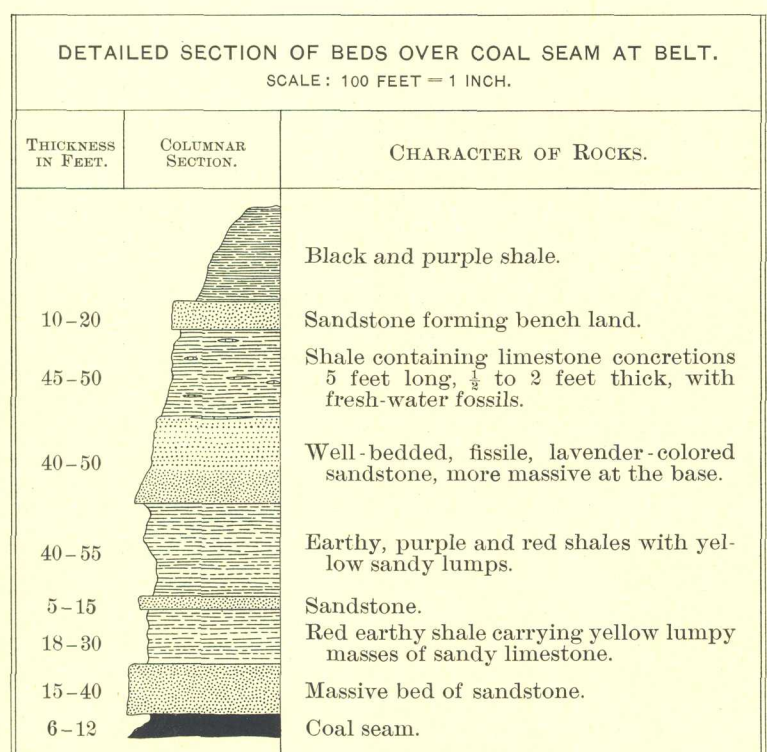
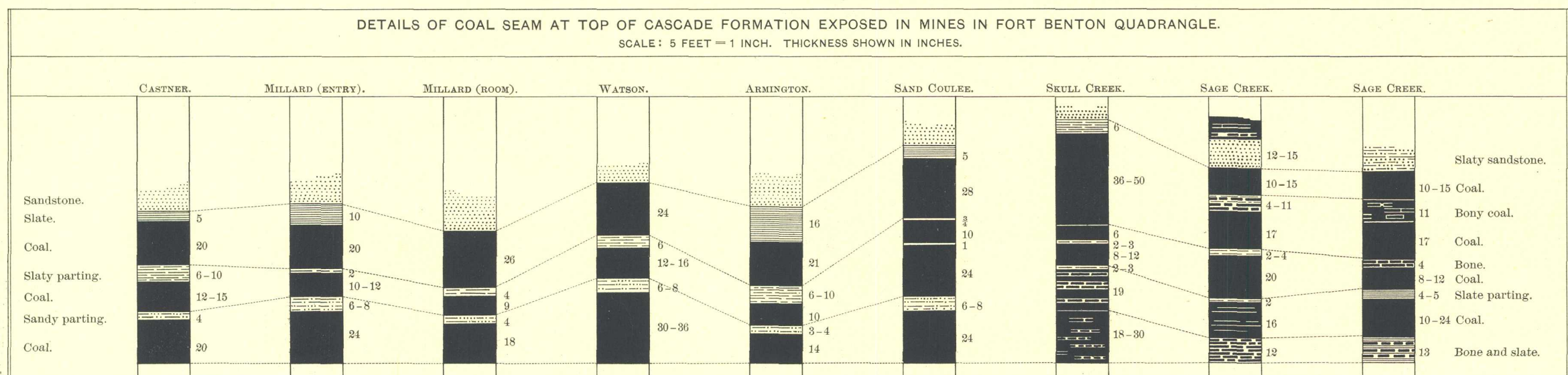


COLUMNAR-SECTION SHEET

MONTANA
FORT BENTON QUADRANGLE

GENERALIZED SECTION OF SEDIMENTARY ROCKS OF LITTLE BELT MOUNTAINS AND HIGHWOOD MOUNTAINS IN FORT BENTON QUADRANGLE.						
SCALE: 1000 FEET = 1 INCH.						
PERIOD.	FORMATION NAME.	SYMBOL.	COLUMNAR SECTION.	THICKNESS IN FEET.	CHARACTER OF ROCKS.	CHARACTER OF TOPOGRAPHY AND SOIL.
PLEISTOCENE.	Alluvium.	Pal		0-25	Loam, gravel, and clay.	Stream bottomlands. Farming lands.
	Bench gravels.	Pbg		0-25	Gravels of local origin.	Stony open prairie. Pasture lands.
	Glacial drift and till.	Pgd		0-250	Boulders of various rocks, quartzitic gravel, and loess.	Rolling hills, boulder strewn. Pasture lands.
	Stanford conglomerate.	Ps		0-100	Conglomerate and sand.	
CRETACEOUS.	Montana formation.	Km		1200-1600	Sandstone and interbedded shales. Drab shale and interbedded sandstones.	Slopes, well covered with soil, and rock ledges. Arid flats, "bad lands." Clayey soil, good farming lands where irrigated.
	Eagle formation.	Ke		200	White sandstone with coal seams and clay-ironstone nodules.	White cliffs and bench lands. Sandy soil.
	Colorado formation.	Kc		1850	Drab or lead-colored clay shale carrying round or oval concretions of gray limestone. Black shale with interbedded sandstones, and a bed of tuff. Red shale and sandstone in thin beds. Lilac-colored sandstone, red clay, and thin limestone.	"Bad lands," steep clay slopes, and muddy flats; water alkaline. Clayey soils, productive when irrigated. Good farming lands.
	Dakota formation.	Kd		180	Red shale with limestone nodules, capped by sandstone, and sandstone at the base.	Bluffs determining bench lands. Springs from sandstone at the base.
	Cascade formation.	Kcd		500	Shaly sandstone and red clay with seam of workable coal at the top. Sandstone and sandy shale.	High bench lands.
	Ellis formation.	Je		120	Sandstone with limestone at the base.	"Hog back" ridges, parallel to the mountain flanks.
JURATRIAS.	Quadrant formation.	Cq		455	Green shale and interbedded limestones. Red sandstone and clay.	Ravines between mountain slopes and outer flanking ridges.
CARBONIFEROUS.	Madison limestone.	Cm		1300	Massive, white and light-gray limestone. Thinly bedded, dark-gray and blue-gray limestone.	Steep mountain slopes, rugged peaks and cliffs, and narrow canyons. Thin but productive soil. Cliffs and mountain slopes. Rich, fertile soil.
	Monarch formation.	Dm		130	Chocolate-brown and black, saccharoidal limestone.	Lower ledges in cliffs. Good soil.
DEVONIAN (AND SILURIAN ?)	Barker formation.	Cb		750	Gray limestone. Greenish micaceous shale carrying interbedded layers of limestone, and conglomerate of limestone pebbles. Sandstone and quartzite.	Bench lands formed by underlying quartzite. Fertile farming lands. Cliffs and bluffs. Rocky ground, rough roads.
CAMBRIAN.						
ARCHEAN.	Gneiss and schist.	Rgn			Gneiss, carrying pink, red, and white feldspars, amphibolite, and schists.	Rounded mountain summits and steep valley slopes. Thin soils; bare, rocky exposures.



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